ENVIRONMENTAL CHEMISTS

Date of Report: 03/05/98 Date Received: 02/19/98

Project: Metro Self Monitor, PO# M10133

Date Samples Extracted: 03/03/98 Date Extracts Analyzed: 03/03/98

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

Sample ID		Chromium	Copper	<u>Nickel</u>	Zinc
M10133		0.77	0.50	0.63	<0.05
Method Blan	k	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 03/05/98 Date Received: 02/19/98

Project: Metro Self Monitor, PO# M10133

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 802118-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.56	0.55	2	0-20
Copper	mg/L (ppm)	0.38	0.34	11	0-20
Nickel	mg/L (ppm)	0.47	0.47	0	0-20
Zinc	mg/L (ppm)	< 0.05	< 0.05	nm	0-20

Laboratory Code: 802118-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	0.56	96	99	80-120	3
Copper	mg/L (ppm)	5	0.38	95	96	80-120	1
Nickel	mg/L (ppm)	10	0.47	95	96	80-120	1
Zinc	mg/L (ppm)	5	< 0.05	98	98	80-120	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery	y Acceptance Criteria	RPD	
Chromium	mg/L (ppm)	5	107	105	80-120	2	
Copper	mg/L (ppm)	5	112	110	80-120	$oldsymbol{ar{2}}$	
Nickel	mg/L (ppm)	10	106	106	80-120	0	
Zinc	mg/L (ppm)	5	106	106	80-120	0	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 206) 285-8282

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06/09/97

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 5, 1998

DUPLICATE COPY

INVOICE #98ACU0305-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M10133: Results of testing requested by Gerry Thompson for material submitted on February 19, 1998.

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 5, 1998

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 19, 1998 from your Metro Self Monitor, PO# M10133 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0305R.DOC